CLAIMS

1. An animal product sampling device comprising:

a well arranged, in use, to collect fluid flowing through a fluid tube connected to the well;

a drain, one end of which is connected to the well, which is arranged such that, in use, fluid from the well may pass to the fluid tube connected to the well; and

a sample tube arranged, in use, to draw fluid from a zone of fluid of reduced turbulence within the well,

wherein the device is arranged such that, in use, the zone of fluid of reduced turbulence, from which a sample of fluid can be drawn through the sample tube, is created in the device due to the dimensions of the well and the drain.

2. A sampling device according to claim 1, wherein the sampling device is integrated into a milking apparatus.

3. A sampling device according to claim 1 or 2, wherein the device is disposable.

4. A sampling device according to any preceding claim, wherein the device further comprises a self-draining valve.

5. A sampling device according to any preceding claim, wherein the device includes a filter therein.

6. A sampling device according to any preceding claim, the device further comprising a proportional sampling device such that, in use, a sample is continually taken.

7. A sampling device according to claim 6, wherein the proportional sampling device is detachable from the sampling device.

8. A sampling device according to any preceding claim, the device further comprising two or more electrodes that contact the fluid being sampled in use, in order to measure ionic phenomena of the fluid.

9. An animal product sample transportation device, the transportation device comprising:

a plurality of tubes of equal diameter, through each of which a sample of fluid passes in use;

varying means arranged, in use, to vary the speed and flow of discharge from the tubes; and

evacuating means arranged, in use, to evacuate the tubes to minimise the quantity of residual fluid.

10. An animal product sample transportation device according to claim 9, the device further comprising control means arranged, in use, to control the flow in the tubes such that each tube can controllably retain a sample temporarily.

11. An animal product sample transportation device according to claim 9 or 10, the device further comprising determining means arranged, in use, to determine the presence of fluid in each tube at the point where it is discharged from the tube.

12. An animal product sample transportation device according to any of claims 9 to 11, the device further comprising washing means arranged, in use, to wash the tubes and remove surplus wash material.

13. An animal product sample transportation device according to any of claims 9 to 12, wherein the plurality of tubes vary in length.

14. An animal product sample transportation device according to any of claims 9 to 13, wherein the tubes are of a known length.

15. An animal product sample transportation device according to any of claims 10 to 14, wherein the control means are bleed valves.

16. An animal product sample transportation device according to any of claims 10 to 15, wherein the control means are multi-way valves.

17. An animal product sample collecting device, the device comprising:

a moveable frame, supporting, in use, a plurality of chambers arranged to collect, in use, animal product samples, the frame being positioned, in use, to accept, in the chambers, samples from an outlet of a sample selecting device; and

a frame driver for moving the frame relative to the outlet in order to allow the samples to be dispensed into the chambers.

18. A collecting device according to claim 17, wherein the chambers comprise removable collection vials.

19. A collecting device according to claim 17 or 18, wherein the movable frame is a rotatable carousel.

20. A collecting device according to claim 18 or 19, the device further comprising removable inserts in which the vials are housed.

21. A collection device according to any of claims 17 to 20, wherein the chambers are temperature controlled.

22. A collecting device according to any of claims 17 to 21, wherein each chamber is indexed such that the system stores a record of which specific sample is within each chamber.

23. A collecting device according to any of claims 17 to 22, wherein each chamber further comprises agitation means for agitating the sample in the base thereof.

24. A collecting device according to claim 23, wherein the agitation means comprises sonification means.

25. A collecting device according to claim 23, wherein the agitation means comprises a magnetic stirrer.

26. A collecting device according to any of claims 17 to 25, the collecting device further comprising a depression valve for releasing one or more of the samples in use.